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EXAMINER

YIGDALL, MICHAEL J

ART UNIT

PAPER NUMBER

2122

5

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,692

Applicant(s)

UOTA, YUJI

Examiner

Michael J. Yigdal

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-22 are pending and have been examined. The priority date considered for the application is 5 April 2000.

Specification

2. The abstract of the disclosure is objected to because the abstract must not exceed 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,157,947 to Watanabe et al. (hereinafter Watanabe).

With respect to claim 1, Watanabe discloses a system development method for developing a system using a development-support system (see the title and abstract) made up of a server used to provide information about functional units each implementing a different function and files describing said different functions, at least one developer client to develop said functional units and at least one user client to develop said system configured to perform desired operations by combining said functional units (see column 2, lines 48-57, which shows a server

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for providing intellectual property, i.e. functional unit information, and user clients for designing systems based on the intellectual property or functional units; note that the functional units are inherently developed by developer clients prior to distribution), wherein all of said server, developer client, and user client are connected through an internet (see FIG. 3, which shows the connections between the servers and the clients, including Internet 110), comprising:

(a) a first step, to be taken by said user client, of registering an operator of said user client as a user of said development-support system (see column 6, lines 41-49, which shows registering users);

(b) a second step, to be taken by said user client, of obtaining, by referring to information about said functional units, files describing a plurality of said functional units which are needed for development of said system (see column 7, line 59 to column 8, line 3, which shows transferring files describing the intellectual property or functional units);

(c) a third step, to be taken by said user client, of developing said system by combining files describing said plurality of said functional units (see column 17, lines 26-49, which shows developing a system based on the files);

(d) a fourth step, to be taken by said user client, of transmitting question information about said functional units or keyword information regarding information required for development of said system to said server, when said system does not operate properly due to malfunctions of said functional units or when said information required for development of said system is to be acquired (see column 18, line 64 to column 19, line 19, which shows providing keywords to retrieve or acquire necessary information); and

(e) a fifth step, to be taken by said user client, of obtaining, when necessary, a file of another functional units, based on reply information to said question information or on said information retrieved according to said keyword information and, if necessary, of changing design to have another try of developing said system and checking operations of a developed system (see column 19, lines 22-29, which shows receiving or obtaining new intellectual property, i.e. files for other functional units, based on a reply).

With respect to claim 2, Watanabe further discloses the limitation wherein, in said second step, said files of said plurality of said functional units are allowed to be obtained only when an application for individual or collective acquisition of said files is made and a right to acquire said files is granted through examination of the application for acquisition of each of said functional units or of every collective group of said functional units (see column 18, lines 35-61, which shows an approval process for granting the right to obtain the files).

With respect to claim 3, Watanabe further discloses the limitation wherein, in said fourth step, when any question about said functional units that has been already asked is contained in said question information, a notification informing that said question about said functional units has been already asked is provided, and other information required for development of said system is able to be obtained (see column 5, lines 34-48, which shows providing intellectual property information for development that includes questions and answers, i.e. questions about the functional units that have already been asked).

With respect to claim 4, Watanabe further discloses the limitation wherein said reply information to said question information is transmitted to each of both said user clients and said

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developer clients which is operated by a user having already acquired said files including a user having transmitted said question information, a user having wanted to obtain said files but having not yet obtained said files and, when there is a model functional unit that has been used as a model for development of said functional unit, a user having developed said model functional unit (see column 5, lines 34-54, which shows sharing intellectual property, which includes questions and answers, among user clients and developer clients; note that the question and answers, i.e. the question information and the corresponding reply information, may be transmitted to the user who submitted the question, to a user who has not yet obtained any files, or to user who has developed a model functional unit).

With respect to claim 6, Watanabe further discloses the limitation wherein said system is a semiconductor device and said functional unit is a basic logic element or a basic logic circuit constructed by combining a plurality of said basic logic elements (see column 16, lines 15-24, which shows developing a semiconductor device based on circuit data).

With respect to claim 7, Watanabe further discloses the limitation wherein said system is a semiconductor device and said functional units include a central processing unit, storage device, buffer, and peripheral device and wherein a file of said peripheral device is so constructed as to be able to select either of a file to implement its function by using hardware or a file to implement its function by using software (see column 8, lines 29-44, and column 13, line 43 to column 14, line 45, which show functional units of a semiconductor device including processing units, memories or storage devices, buffers and peripheral devices; see also column 17, lines 26-49, which shows implementing functions using hardware and software).

With respect to claim 8, Watanabe further discloses the limitation wherein said system is software and said functional units are routines or objects to perform predetermined processing (see column 17, lines 26-49, which shows software-based design stages in which the functional units are specified as functions or routines in the C or C++ languages).

With respect to claim 9, see the explanation for claim 1 set forth above. Note that Watanabe further discloses a storage medium storing a system development program for causing a computer to execute the recited method (see column 3, lines 8-16).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, as applied to claim 1 above, in view of U.S. Pat. No. 6,393,490 to Stiles et al. (hereinafter Stiles).

With respect to claim 5, although Watanabe discloses notifying users when new or updated intellectual property is available (see column 19, lines 22-29), Watanabe does not expressly disclose a sixth step of transmitting, when said developer of said functional units has found a malfunction of said functional units, contact information notifying that said functional

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units have said malfunction and information about a method for taking a measure against said malfunction.

However, Stiles discloses transmitting contact information from the developer to notify users of defects or malfunctions that have been identified (see column 2, lines 18-21) and to provide appropriate solutions (see column 6, lines 34-38), for the purpose of improving customer service (see column 3, lines 53-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the notification provided by Watanabe to include contact information related to malfunctions found by the developer and the corresponding corrective measures, as taught by Stiles, for the purpose of improving customer service.

7. Claims 10-13 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Stiles.

With respect to claim 10, Watanabe discloses a development-support system (see the title and abstract) comprising:

(a) a server used to provide information about functional units each implementing a different function and files describing said different function (see column 2, lines 48-57, which shows a server for providing intellectual property, i.e. functional unit information);

(b) at least one developer client to develop said functional units (note that the functional units are inherently developed by developer clients prior to distribution);

(c) at least one user client to develop a system configured to perform desired operations by combining said functional units (see column 2, lines 48-57, which shows user clients for designing systems based on the intellectual property or functional units); and

(d) wherein all of said server, said developer client, and said user client are connected through an internet (see FIG. 3, which shows the connections between the servers and the clients, including Internet 110); and

(e) wherein said user client obtains files of a plurality of said functional units (see column 7, line 59 to column 8, line 3, which shows transferring files describing the intellectual property or functional units) and develops said system by combining files of said plurality of functional units (see column 17, lines 26-49, which shows developing a system based on the files).

Although Watanabe discloses providing questions and answers related to the intellectual property or functional units (see column 5, lines 34-48), Watanabe does not expressly disclose the limitation:

(f) wherein said user client checks operations of the developed system and, as a result, when said developed system does not operate properly due to a malfunction of any one of said functional units, transmits question information about said malfunction of said functional unit to said server;

(g) wherein said server, after having accepted and registered said question information, transmits said question information to said developer client operated by said developer client of said functional units;

(h) wherein said developer client transmits reply information to said question information to said server; and

(i) wherein said server, after having accepted and registered said reply information, transmits said reply information to said user client or another developer client operated by a user having interests in said functional units.

However, Stiles discloses parts (f), (g), (h) and (i) above in terms of checking the operation of the system and transmitting a question to the developer when a defect or malfunction is encountered by the user (see column 5, line 46 to column 6, line 4), and transmitting a corresponding reply to the user from the developer (see column 6, lines 34-38), by way of a server (see column 6, lines 51-64), for the purpose of improving customer service (see column 3, lines 53-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the questions and answers provided by Watanabe for reporting and responding to malfunctions in the functional units, as taught by Stiles, for the purpose of improving customer service.

With respect to claim 11, the combination of Watanabe and Stiles further discloses the limitation wherein said user client makes an application for acquisition of each of a plurality of functional units or of said plurality of functional units collectively, said server examines said application for each of said plurality of functional units or for said plurality of functional units collectively and grants said user client a right to acquire, and said user client, based on the granted right, obtains files of said functional unit from said server (see Watanabe, column 18, lines 35-61, which shows an approval process for granting the right to obtain the files).

With respect to claim 12, the combination of Watanabe and Stiles further discloses the limitation wherein said server, only when said question information has been registered as coming from a user of said development-support system and said question information has been transmitted from a user having obtained files of said functional units, accepts said question information (see Stiles, column 2, lines 15-17, which shows that users transmit question information to the developer, and column 4, lines 29-32, which shows that such users have already obtained the program files).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to regulate the questions and answers provided by Watanabe to accept such questions only from users who have obtained the files, as taught by Stiles, for the purpose of improving customer service (see Stiles, column 3, lines 53-65).

With respect to claim 13, the combination of Watanabe and Stiles further discloses the limitation wherein said server, when having already accepted and registered said question information about said functional units, registers said question information together with question information that has been already registered and transmits contents of said registration to said developer client (see Stiles, column 6, lines 4-8, which shows storing and categorizing the question information, and column 6, lines 21-25, which shows transmitting the contents to the developer client).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to register the questions and answers provided by Watanabe together with other questions and answers, as taught by Stiles, for the purpose of improving customer service (see Stiles, column 3, lines 53-65).

With respect to claim 16, the combination of Watanabe and Stiles further discloses the limitation wherein said server accepts said reply information only when said reply information has been transmitted by a user who has been registered as a user of said development-support system and who has developed said functional unit (see Stiles, column 2, lines 18-21, which shows that developers transmit reply information to the user, and column 4, lines 21-22, which shows that such developers, inherently users of the development support system, have developed the program or functional units).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to regulate the questions and answers provided by Watanabe to accept such answers only from the developers of the functional units, as taught by Stiles, for the purpose of improving customer service (see Stiles, column 3, lines 53-65).

With respect to claim 17, the combination of Watanabe and Stiles further discloses the limitation wherein said interested user is a user having obtained said files including a user having transmitted said question information, a user having wanted to obtain said files but having not yet obtained said files or, when there is a model functional unit that has been used as a model for development of said functional unit, a user having developed said model functional unit (see Watanabe, column 5, lines 34-54, which shows sharing intellectual property that includes questions and answers; note that the question and answers, i.e. the question information and the corresponding reply information, may be transmitted to the user who submitted the question, to a user who has not yet obtained any files, or to user who has developed a model functional unit).

With respect to claim 18, the combination of Watanabe and Stiles further discloses the limitation wherein said developer client transmits, when said developer of said functional unit has found a malfunction of said functional unit, contact information notifying that said functional unit has said malfunction and information about a method for taking a measure against said malfunction, to said server (see Stiles, column 2, lines 18-21, which shows transmitting contact information from the developer to notify users of defects or malfunctions that have been identified, and column 6, lines 34-38, which shows providing appropriate solutions).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the notification provided by Watanabe to include contact information related to malfunctions found by the developer and the corresponding corrective measures, as taught by Stiles, for the purpose of improving customer service (see Stiles, column 3, lines 53-65).

With respect to claim 19, the combination of Watanabe and Stiles further discloses the limitation wherein said system is a semiconductor device and said functional unit is a basic logic element or a basic logic circuit constructed by combining a plurality of said basic logic elements (see Watanabe, column 16, lines 15-24, which shows developing a semiconductor device based on circuit data).

With respect to claim 20, the combination of Watanabe and Stiles further discloses the limitation wherein said system is a semiconductor device and said functional unit is a central processing unit, storage device, buffer, and peripheral device and wherein a file of said peripheral device is so constructed as to be able to select either of a file to implement its function by using hardware or a file to implement its function by using software (see Watanabe, column

8, lines 29-44, and column 13, line 43 to column 14, line 45, which show functional units of a semiconductor device including processing units, memories or storage devices, buffers and peripheral devices; see also column 17, lines 26-49, which shows implementing functions using hardware and software).

With respect to claim 21, the combination of Watanabe and Stiles further discloses the limitation wherein said system is software and said functional units are routines or objects to perform predetermined processing (see Watanabe, column 17, lines 26-49, which shows software-based design stages in which the functional units are specified as functions or routines in the C or C++ languages).

With respect to claim 22, see the explanation for claim 10 set forth above. Note that the combination of Watanabe and Stiles further discloses a storage medium storing a system development control program for causing a computer to execute functions of the recited system (see Watanabe, column 3, lines 8-16).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Stiles, as applied to claim 10 above, and further in view of U.S. Pat. No. 5,438,658 to Fitzpatrick et al. (hereinafter Fitzpatrick).

With respect to claim 14, the combination of Watanabe and Stiles does not expressly disclose the limitation wherein said server transmits a date when a reply to said question information should be made to said developer client and, if there is no reply by said date, transmits information urging said developer client to make a reply and, if there is still no reply

even after said date, again transmits information urging said developer client to make a reply on every predetermined date, to said developer client.

However, Fitzpatrick discloses transmitting a date by which a response or reply should be made (see column 4, lines 10-15 and 29-32) and repeatedly transmitting a reminder to the user, i.e. the developer client, to respond to the information (see column 6, lines 3-29), so that a reply may be made prior to the specified date (see column 2, lines 41-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include, in the system of Watanabe and Stiles, reply dates and reminders, as taught by Fitzpatrick, for purpose of soliciting a timely response from the developer.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Stiles in view of Fitzpatrick, as applied to claim 14 above, and further in view of U.S. Pat. No. 6,321,133 to Smirnov et al. (hereinafter Smirnov).

With respect to claim 15, the combination of Watanabe, Stiles and Fitzpatrick does not expressly disclose the limitation wherein said server transmits information notifying that a predetermined penalty is imposed every time said reply is delayed by said one date behind said date or by said predetermined dates behind said date, together with said information urging said developer client to make said reply, and an amount equivalent to said penalty is automatically drawn from a bank account every time said reply is delayed by one date behind said date or by predetermined dates behind said date.

However, Smirnov discloses levying a penalty when a task is not completed by a certain deadline, wherein the amount of the penalty is in some way associated with the length of the delay (see column 5, lines 44-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the reminder notices of Watanabe, Stiles and Fitzpatrick with penalty information, and to levy such penalties when a reply is not made by the predetermined date, as taught by Smirnov, for the purpose of soliciting a timely response from the developer (see Fitzpatrick, column 2, lines 41-45).

Furthermore, it is well known that payments may be automatically posted to or drawn from a bank account. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to automatically draw the penalty levied by Watanabe, Stiles, Fitzpatrick and Smirnov from a bank account.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 5,983,277 to Heile et al. discloses a system for developing semiconductor devices by a plurality of users, in which developers may work on functional units, and updates are automatically distributed. U.S. Pat. No. 5,805,891 to Bizuneh et al. discloses a method for managing software updates, including testing for malfunctions and distributing software modules to users.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MY

Michael J. Yigdall
Examiner
Art Unit 2122

mjy
April 14, 2004

Hoang Anthony Nguyen BA

**ANTONY NGUYEN-BA
PRIMARY EXAMINER**